**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Making Mutations**

**In this simulation, you will be using your name to explore the types of mutations that are in the natural world. Follow the directions on this page and** [**http://nature.ca/genome/04/0413\_e.cfm#010**](http://nature.ca/genome/04/0413_e.cfm#010) **to find out the effects of each mutation.**

1. **Enter your name in the white box and press “Decode.”**
2. **Record your results below.**

**Results:**

**Codons:**

**Previous Codons:**

**What happened?**

1. **Press “Decode.” Press the “Missense” button and record your results below.**

**Results:**

**Codons:**

**Previous Codons:**

**What happened?**

1. **Press “Decode.” Press the “Nonsense” button and record your results below.**

**Results:**

**Codons:**

**Previous Codons:**

**What happened?**

1. **Press “Decode.” Press the “Silent” button and record your results below.**

**Results:**

**Codons:**

**Previous Codons:**

**What happened?**

1. **Press “Decode.” Press the “Deletion” button and record your results below.**

**Results:**

**Codons:**

**Previous Codons:**

**What happened?**

1. **Press “Decode.” Press the “Insertion” button and record your results below.**

**Results:**

**Codons:**

**Previous Codons:**

**What happened?**

**Do all mutations in DNA cause disease?**

**Do all mutations in DNA have an effect on the organism?**